

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

A25SO  
Revision 20  
Piper  
PA-46-310P  
PA-46-350P  
PA-46-500TP  
PA-46R-350T

October 26, 2009

**TYPE CERTIFICATE DATA SHEET NO. A25SO**

This data sheet, which is part of Type Certificate No. A25SO, prescribes conditions and limitations under which the product for which type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Piper Aircraft, Inc.  
2926 Piper Drive  
Vero Beach, Florida 32960

Type Certificate Holder Record The New Piper Aircraft, Inc transferred TC A25SO to Piper Aircraft, Inc on August 7, 2006.

**I. - Model PA-46-310P (Malibu), 6 PCLM (Normal Category), Approved September 27, 1983.**

Engine Teledyne Continental, TC No. E8CE, Model TSI0-520-BE

Fuel 100/100LL minimum grade aviation gasoline

Engine Limits For all operations:  
2600 RPM and 38" Hg MAP (310 HP), sea level to 24,000 ft.  
2600 RPM and 35" Hg MAP above 24,000 ft.  
  
2400 RPM and 31" Hg MAP maximum when leaned to 50° F lean of peak,  
any altitude.

Propeller and Propeller Limits Hartzell, TC No. P-920, Hub BHC-C2YF-1BF, Blade F8052 ( )  
Pitch: High 38.0° ± 1°, Low 16.0° ± 0.2° at 30" station.  
Diameter: Not over 80", not under 78".  
Spinner: Hartzell D-4810 or D-4810P.  
Governor: Hartzell Model E-5-2.

Airspeed Limits

V <sub>NE</sub> (Never Exceed)	203 KIAS
V <sub>NO</sub> (Maximum Structural Cruise)	173 KIAS
V <sub>A</sub> (Maneuvering 4100 lb.)	135 KIAS
V <sub>A</sub> (Maneuvering 2450 lb.)	103 KIAS
V <sub>FE</sub> (Maximum Flaps Extended)	120 KIAS
V <sub>LO</sub> (Maximum Landing Gear Operation)	
Extension	170 KIAS
Retraction	130 KIAS
V <sub>LE</sub> (Maximum Landing Gear Extended)	200 KIAS

<u>C.G. Range (Gear Extended)</u>	WT. <u>(LB.)</u>	FWD. LIMIT <u>IN. AFT OF DATUM</u>	AFT LIMIT <u>IN. AFT OF DATUM</u>
	4100	143.3 in.	147.1 in.
	3680	136.1 in.	147.1 in.
	2450 or less	130.7 in.	147.1 in.

Empty Weight C.G. Range None

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<u>Maximum Weight</u>	Ramp : 4118 lb. Takeoff : 4100 lb. Landing : 3900 lb.			
<u>No. of Seats</u>	6 (2 at +135.5, 2 at +177.0, 2 at +218.75)			
<u>Maximum Baggage</u>	100 lb. at (+88.6) (Fwd.) 100 lb. at (+248.23) (Aft)			
<u>Fuel Capacity</u>	122 gals. at (+150.31) (2 wing tanks) See NOTE 1 for data on system fuel.			
<u>Oil Capacity</u>	8 qts. at (+53.5) See NOTE 1 for data on system oil.			
<u>Maximum Operating Altitude</u>	25,000 ft.			
<u>Maximum Cabin Operating Pressure Differential</u>	5.5 PSID			
<u>Control Surface Movements</u>	Ailerons	( $\pm 1^\circ$ )	Up 18°	Down 18°
	Elevator	( $\pm 5^\circ$ )	Up 23.5°	Down 14.5°
	Rudder	( $+1^\circ, -0^\circ$ )	Left 26°	Right 30°
	Elevator	( $+0^\circ, -1^\circ$ )	Down 24.5°	Up 19°
	Trim Tab			(Elevator Neutral)
	Wing Flaps		Up 0° ( $\pm 1^\circ$ )	Down 35° ( $+0^\circ, -1^\circ$ )
	S/N 46-8408001 to 46-8508109			
	Wing Flaps		Up 0° ( $\pm 1^\circ$ )	Down 35° ( $\pm 1^\circ$ )
	S/N 46-8608001 and up			
<u>Manufacturer's Serial Numbers</u>	46-8408001 through 46-8408087, 46-8508001 through 46-8508109, 46-8608001 through 46-8608067, 4608001 through 4608140.			

## **II. - Model PA-46-350P (Malibu Mirage), 6 PCLM (Normal Category), Approved August 30, 1988.**

<u>Engine</u>	Textron Lycoming, TC No. E14EA, Model TIO-540-AE2A
<u>Fuel</u>	100/100LL minimum grade aviation gasoline
<u>Engine Limits</u>	For all operations: 2500 RPM and 42.0" Hg MAP (350 HP), sea level to 20,600 ft. 42 - 1.6" Hg MAP decrease per each 1000 ft. altitude increase, 20,600 ft. to 25,000 ft.
<u>Propeller and Propeller Limits</u>	Hartzell, TC No. P42GL, Hub HC-I2YR-1BF, Blade F8074 (standard 2 blade-Serial Numbers 4622001 through 4622200 and 4636001 through 4636195) Pitch: High $40.5^\circ \pm 0.5^\circ$ Low $17.6^\circ \pm 0.2^\circ$ at 30" station. Diameter: Not over 80", not under 79". Spinner: Hartzell A-2298-3P. Governor: Hartzell Model V-5-2 or V-11-1  The following limitation is applicable to the two-bladed aluminum propeller installation: Do not exceed 36" MAP below 2400 RPM Do not exceed 32" MAP below 2300 RPM  Hartzell, TC No. P33EA, Hub HC-I3YR-1E, Blade 7890K, 3-blade, Serial Numbers 4636132 and up Pitch: High $38.7^\circ \pm 0.5^\circ$ Low $13.65^\circ \pm 0.15^\circ$ at 30" station. Diameter: 80"

Spinner: Hartzell D-6750P.  
Governor: Hartzell Model V-5-2 or V-11-1

Hartzell, TC No. P33EA, Hub HC-I3Y1R-1N, Blade N7605K+2, 3-blade, Serial Numbers 4636460, 4636462 and up

Pitch: High  $38.0^\circ \pm 1.0^\circ$  Low  $14.0^\circ \pm 0.2^\circ$  at 30" station.

Diameter: 80"

Spinner: Hartzell D-6750-1P.

Governor: Hartzell Model V-5-2, V-11-1 or S-1-30

#### Airspeed Limits

V <sub>NE</sub> (Never Exceed)	198 KIAS
V <sub>NO</sub> (Maximum Structural Cruise)	168 KIAS
V <sub>A</sub> (Maneuvering 4340 lb.) (S/N 4636196 & up)	133 KIAS
V <sub>A</sub> (Maneuvering 4300 lb.)	133 KIAS
V <sub>A</sub> (Maneuvering 2450 lb.)	100 KIAS
V <sub>FE</sub> (Maximum Flaps Extended)	116 KIAS
V <sub>LO</sub> (Maximum Landing Gear Operation)	
Extension	165 KIAS
Retraction	126 KIAS
V <sub>LE</sub> (Maximum Landing Gear Extended)	195 KIAS

#### C.G. Range (Gear Extended)

WT. (LB.)	FWD. LIMIT IN. AFT OF DATUM	AFT LIMIT IN. AFT OF DATUM
4300 (4340)	143.3 in. (144.1 in)	147.1 in.
4100 (4123)	139.1 in. (139.6 in)	147.1 in.
4000	137.0 in.	146.5 in.
2450	130.7 in.	137.6 in.
2400	130.7 in.	137.3 in.

Note: Numbers in parentheses apply to serial numbers 4636196 and up.

#### Empty Weight C.G. Range

None

#### Maximum Weight

Ramp : 4318 lb. (4358 lb.)

Takeoff : 4300 lb. (4340 lb.)

Landing : 4100 lb. (4123 lb.)

Note: Numbers in parentheses apply to serial numbers 4636196 and up.

#### No. of Seats

6 (2 at +135.5, 2 at +177.0, 2 at +218.75)

#### Maximum Baggage

100 lb. at (+88.6) (Fwd.)

100 lb. at (+248.23) (Aft)

#### Fuel Capacity

122 gals. at (+150.31) (2 wing tanks)

See NOTE 1 for data on system fuel.

#### Oil Capacity

12 qts. at (+53.5)

See NOTE 1 for data on system oil.

#### Maximum Operating Altitude

25,000 ft.

#### Maximum Cabin Operating Pressure Differential

5.5 PSID (+0.1, -0.15)

#### Control Surface Movements

Ailerons	( $\pm 1^\circ$ )	Up	18°	Down	18°
Elevator	( $\pm 0.5^\circ$ )	Up	23.5°	Down	14.5°
Rudder	(+1°, -0°)	Left	26°	Right	30°
Elevator	(+0°, -1°)	Down	24.5°	Up	19°
Trim Tab	(Elevator Neutral)				

Wing Flaps	Up	0° ( $\pm 1^\circ$ )	Down	10° ( $\pm 2^\circ$ ) 20° (+2°, -0°) 36° (+0°, -1°)
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Manufacturer's Serial Numbers 4622001 through 4622200, and 4636001 and up.

### **III. – Model PA-46-500TP (Malibu Meridian), 6PCLM (Normal Category), Approved September 27, 2000.**

Engine Pratt & Whitney Canada, PT6A-42A

Fuel Jet A and A-1 fuels conforming to Pratt & Whitney Specification 522 or Service Bulletin 3044, CPW204. (Fuels shall conform to the specification as listed or to subsequent revisions thereto.)  
MIL-I-27686 Fuel System Icing Inhibitor or equivalent must be used in the fuel in the amount up to 0.15% by volume.

Oil (Engine & Gearbox) PWC PT6 Engine Service Bulletin No. 3001 lists approved brand oils.

Engine Limits

Takeoff and max continuous power	500 SHP
Compressor Turbine Speed (Ng)	39000 RPM (104%)*
Propeller Speed (Np)	2205 RPM*

\* See Note 5

Propeller and Propeller Limits Hartzell, T.C. No. P10NE, Hub HC-E4N-3Q, Blade E8501B-3.5

Pitch: Low  $19.0^\circ \pm 0.1^\circ$  at 30" station.

Diameter: Not over 82.5", not under 81.5".

Spinner: Hartzell D-630-5P

Governor: Woodward Model 210 638

Airspeed Limits

V <sub>MO</sub> (Maximum Operating Speed)	188 KIAS
V <sub>O</sub> (Operating Maneuvering Speed)	127 KIAS
V <sub>FE</sub> (Flaps Extended Speed for 10° Flaps)	168 KIAS
V <sub>FE</sub> (Flaps Extended Speed for 20° Flaps)	135 KIAS
V <sub>FE</sub> (Flaps Extended Speed for 36° Flaps)	118 KIAS
V <sub>LO</sub> (Maximum Landing Gear Operation)	
Extension	168 KIAS
Retraction	129 KIAS
V <sub>LE</sub> (Maximum Landing Gear Extended)	168 KIAS

C.G. Range For airplanes S/N 4697001 through 4697156:

WT. (LB.)	FWD LIMIT IN. AFT OF DATUM	AFT LIMIT IN. AFT OF DATUM
4892	140.22 in.	147.10 in.
4850	140.06 in.	147.10 in.
4100	137.23 in.	147.10 in.
3508	135.00 in.	143.67 in.
3000	135.00 in.	140.75 in.

For airplanes S/N 4697157 and up and earlier airplanes having Kit 767-360 installed:

WT. (LB.)	FWD LIMIT IN. AFT OF DATUM	AFT LIMIT IN. AFT OF DATUM
5134	141.13 in.	147.10 in.
5092	140.97 in.	147.10 in.
4892	140.22 in.	147.10 in.
4850	140.06 in.	147.10 in.
4100	137.23 in.	147.10 in.
3508	135.00 in.	143.67 in.
3000	135.00 in.	140.75 in.

<u>Empty Weight C.G. Range</u>	None				
<u>Maximum Weight</u>		RAMP (LB.)	TAKEOFF (LB.)	LANDING (LB.)	MZFW (LB.)
	For airplanes S/N 4697001 through 4697156:	4892	4850	4850	
	For airplanes S/N 4697157 and up and earlier airplanes having Kit 767-360 installed:	5134	5092	4850	4850
<u>No. of Seats</u>	6 (2 at +135.5, 2 at 177.0, 2 at 218.75)				
<u>Maximum Baggage</u>	100 lbs. at (+248.23)				
<u>Fuel Capacity</u>	173 gallons at (+148.75) (2 wing tanks) 170 gallons (1140 lbs.) useable See Note 1 for data on system fuel.				
<u>Oil Capacity</u>	12 quarts at (+77.76) See Note 1 for data on system oil.				
<u>Maximum Operating Altitude</u>	30,000 ft.				
<u>OAT Operating Limitation</u>	<p>For airplanes S/N 4697001 through 4697173: +46°C (+115°F) maximum -34°C (-30°F) minimum with Jet-A -41°C (-42°F) minimum with Jet A-1</p> <p>For airplanes S/N 4697174 and up and S/N 4697001 through 4697158 having Piper Kit 767-380 installed and S/N 4697159 through 4697173 having Piper Kit 767-381 installed: +46°C (+115°F) maximum -54°C (-65°F) minimum</p>				
<u>Minimum Fuel Temperature</u>	<p>For airplanes S/N 4697159 and up and S/N 4697001 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1</p> <p>NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed.</p>				
<u>Maximum Cabin Operating Pressure Differential</u>	5.5 PSID				
<u>Control Surface Movements</u>	Aileron	(± 1°)	Up 18°	Down 18°	
	Elevator	(±.5°)	Up 23.5°	Down 14.5°	
	Elevator Trim Tab	(+0°,-1°)	Up 19°	Down 24.5° (Elevator Neutral)	
	Rudder	(+1°-0°)	Left 26°	Right 30°	
	Rudder Trim Tab	(±1°)	Left 13.5°	Right 13° (Rudder Neutral)	
	Wing Flaps		Up 0° (±1°)	Down	10° (±2°) 20° (+2°,-0°) 36° (+0°,-1°)
<u>Manufacturer's Serial Numbers</u>	4697001 and up				

**IV. - Model PA-46R-350T (Malibu Matrix), 6 PCLM (Normal Category), Approved October 26, 2007.**

<u>Engine</u>	Textron Lycoming, TC No. E14EA, Model TIO-540-AE2A		
<u>Fuel</u>	100/100LL minimum grade aviation gasoline		
<u>Engine Limits</u>	For all operations: 2500 RPM and 42.0" Hg MAP (350 HP), sea level to 20,600 ft. 42 - 1.6" Hg MAP decrease per each 1000 ft. altitude increase, 20,600 ft. to 25,000 ft.		
<u>Propeller and Propeller Limits</u>	Hartzell, TC No. P33EA, Hub HC-I3YR-1E, Blade 7890K or 7890B, 3-blade Pitch: High $38.7^\circ \pm 0.5^\circ$ Low $13.65^\circ \pm 0.15^\circ$ at 30" station. Diameter: 80" Spinner: Hartzell D-6750P. Governor: Hartzell Model V-11-1  Hartzell, TC No. P33EA, Hub HC-I3Y1R-1N, Blade N7605+2 or N7605K+2, 3-blade, Serial Numbers 4692123 and up Pitch: High $38.0^\circ \pm 1.0^\circ$ Low $14.0^\circ \pm 0.2^\circ$ at 30" station. Diameter: 80" Spinner: Hartzell D-6750-1P. Governor: Hartzell Model V-11-1 or S-1-30		
<u>Airspeed Limits</u>	$V_{NE}$ (Never Exceed)	198 KIAS	
	$V_{NO}$ (Maximum Structural Cruise)	168 KIAS	
	$V_A$ (Maneuvering 4340 lb.)	133 KIAS	
	$V_A$ (Maneuvering 2900 lb.)	108 KIAS	
	$V_{FE}$ (Maximum Flaps Extended for $10^\circ$ )	165 KIAS	
	$V_{FE}$ (Maximum Flaps Extended for $20^\circ$ )	130 KIAS	
	$V_{FE}$ (Maximum Flaps Extended for $36^\circ$ )	116 KIAS	
	$V_{LO}$ (Maximum Landing Gear Operation)		
	Extension	165 KIAS	
	Retraction	126 KIAS	
	$V_{LE}$ (Maximum Landing Gear Extended)	195 KIAS	
<u>C.G. Range (Gear Extended)</u>	WT. (LB.)	FWD. LIMIT IN. AFT OF DATUM	AFT LIMIT IN. AFT OF DATUM
	4340	144.1 in	147.1 in.
	4123	139.6 in	147.1 in.
	4000	137.0 in.	146.5 in.
	2900	132.5 in.	140.2 in
<u>Empty Weight C.G. Range</u>	None		
<u>Maximum Weight</u>	Ramp : 4358 lb. Takeoff : 4340 lb. Landing : 4123 lb.		
<u>No. of Seats</u>	6 (2 at +135.5, 2 at +177.0, 2 at +218.75)		
<u>Maximum Baggage</u>	100 lb. at (+88.6) (Fwd.) 100 lb. at (+248.23) (Aft)		
<u>Fuel Capacity</u>	122 gals. at (+150.31) (2 wing tanks) See NOTE 1 for data on system fuel.		

Oil Capacity 12 qts. at (+53.5)  
See NOTE 1 for data on system oil.

Maximum Operating Altitude 25,000 ft.

<u>Control Surface Movements</u>	Ailerons	( $\pm 1^\circ$ )	Up	18°	Down	18°
	Elevator	( $\pm 0.5^\circ$ )	Up	23.5°	Down	14.5 °
	Rudder	(+1°, -0°)	Left	26°	Right	30°
	Elevator	(+0°, -1°)	Down	24.5°	Up	19°
	Trim Tab	(Elevator Neutral)				
	Wing Flaps		Up	0° ( $\pm 1^\circ$ )	Down	10° ( $\pm 2^\circ$ ) 20° (+2°, -0°) 36° (+0°, -1°)

Manufacturer's Serial Numbers 4692001 and up.

#### DATA PERTINENT TO ALL MODELS

Datum 100 in. forward pressure bulkhead.

Leveling Means Top or bottom fuselage at B.L. 0 (constant section).

Certification Basis Type Certificate No. A25SO issued September 27, 1983.  
Date of application for Type Certificate, August 22, 1979.

#### PA-46-310P and PA-46-350P:

FAR Part 23, effective February 1, 1965, as amended by Amendment 23-25, effective March 6, 1980; FAR 25.783(e) as amended by Amendment 25-54, effective October 14, 1980; FAR 25.831(c) and (d) as amended by Amendment 25-41, effective September 1, 1977; and FAR 36, Appendix F through Amendment 36-15, effective May 6, 1988 when equipped with 2 blade propeller or FAR 36, Appendix G through Amendment 36-16, effective December 18, 1988 when equipped with optional 3 blade propeller.

No equivalent safety findings.

Special Conditions No. 23-ACE-53, Docket No. 082CE.

For PA-46-350P aircraft equipped with Piper factory installed Avidyne Entegra system (See Piper Report VB-1954), the additional certification basis for installation specific items only is: FAR 23.1529 as amended by Amendment 23-26, effective 14 October 1980; FAR 23.1523 as amended by Amendment 23-34, effective 17 February 1987; FAR 23.1322, 23.1331, 23.1357 (a)(2), (b), (c), (d) as amended by Amendment 23-43, effective 10 May 1993; FAR 23.305, 23.613, 23.773 (a)(2), 23.1525, 23.1549 (a) as amended by Amendment 23-45, effective 7 September 1993; FAR 23.301, 23.337 (a)(1), (b)(1), 23.341 (a), 23.473, 23.561 (b)(3), (e), 23.571 (a), 23.607, 23.611, as amended by Amendment 23-48, effective 11 March 1996; FAR 23.1303 (a), (b), (f), 23.1307, 23.1309 (a), (a)(1), (a)(2), (b), (e), 23.1311 (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c), 23.1321 (a), (c), (d), (e), 23.1323 (a), (c), 23.1329, 23.1351 (a)(1), (a)(2)(i), (b)(2), (b)(3), 23.1353 (d), (h), 23.1359 (c), 23.1365 (a), (b), (d), (e), (f), 23.1431 (a), (b) as amended by Amendment 23-49, effective 11 March 1996; FAR 23.1325 (a), (b)(1), (b)(2)(ii), (b)(3), (c), (e), 23.1543 (b), (c), 23.1545 (a), (b)(3), (b)(4), (c), 23.1555 (a), (b), 23.1563, 23.1581 (a), (b)(2), (b)(3), (f), 23.1583 (m), 23.1585 (j) as amended by Amendment 23-50, effective 11 March 1996; FAR 23.777 (a), (b), 23.1337 as amended by Amendment 23-51, effective 11 March 1996; FAR 23.1305 (a)(1), (a)(2), (a)(3), (b)(2), (b)(3), (b)(4), (b)(5), (b)(6)(i) as amended by Amendment 23-52, effective 25 July 1996; Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005.

Eligible Serial Numbers: 4636375 and up.

For the PA-46-350P Mirage aircraft equipped with Hartzell propeller HC-I3Y1R-1N/N7605K+2 and Governor model S-1-30 (See Piper Report VB-2132) the additional certification basis for installation specific items only is: FAR 23.905 (a), (b), (d) as

amended by Amendment 23-43, effective 10 May 1993; 23.907 as amended by Amendment 23-59, effective 24 October 2008; and FAR 36, Appendix G through Amendment 36-28, dated 3 February 2006.  
Eligible Serial Numbers: 4636460, 4636462 & up.

For PA-46-350P aircraft equipped with Piper factory installed Garmin G1000 system and GFC 700 AFCS (See Piper Drawing 106800), the additional certification basis for installation specific items only as amended by Amendment 23-59 dated December 23, 2008, is:

14 CFR 23.23  
14 CFR 23.25  
14 CFR 23.251  
14 CFR 23.301 (a), (b), (c)  
14 CFR 23.305  
14 CFR 23.337  
14 CFR 23.341 (a), (c)  
14 CFR 23.397 (a)  
14 CFR 23.473  
14 CFR 23.561 (a), (b)(3), (e)  
14 CFR 23.607  
14 CFR 23.611  
14 CFR 23.613  
14 CFR 23.677 (b), (d)  
14 CFR 23.773 (a) (1), (a)(2)  
14 CFR 23.777 (a), (b), (d)  
14 CFR 23.841 (b)(5), (6)  
14 CFR 23.867  
14 CFR 23.1141 (a), (b), (c), (d)  
14 CFR 23.1303 (a), (b), (c), (f)  
14 CFR 23.1305 (a) (1), (a)(2), (a)(3), (b)(2), (b)(4)(i), (b)(5), (b)(6)(i)  
14 CFR 23.1307  
14 CFR 23.1308 (a)(1), (a)(2), (a)(3), (b), (c)  
14 CFR 23.1309 (a)(I), (a)(2), (b), (c), (e)  
14 CFR 23.1311 (a) (1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c)  
14 CFR 23.1321 (a), (c), (d)(5), (e)  
14 CFR 23.1322 (a), (b), (c), (d), (e)  
14 CFR 23.1323 (a), (c)  
14 CFR 23.1325 (a), (b)(I), (b)(2)(ii)  
14 CFR 23.1326  
14 CFR 23.1329 (a)(I), (b), (d), (e), (f), (g), (h)  
14 CFR 23.1331 (a), (b), (c)  
14 CFR 23.1337 (b)(I), (b)(4)  
14 CFR 23.1351 (a)(I), (a)(2)(i), (b)(I)(i)  
14 CFR 23.1353 (h)  
14 CFR 23.1357 (a)(2), (b), (c), (d)  
14 CFR 23.1359 (c)  
14 CFR 23.1365 (a), (b), (d), (e), (f)  
14 CFR 23.1431 (a), (b), (e)  
14 CFR 23.1507  
14 CFR 23.1523  
14 CFR 23.1525  
14 CFR 23.1529  
14 CFR 23.1543 (b)(c)  
14 CFR 23.1545 (a), (b) (1), (b)(2), (b)(3), (b) (4)



14 CFR 23.1549 (a), (b), (c)  
 14 CFR 23.1553  
 14 CFR 23.1555 (a), (b), (d)(2)  
 14 CFR 23.1559 (c)  
 14 CFR 23.1563 (a)(b)  
 14 CFR 23.1567 (a)  
 14 CFR 23.1581  
 14 CFR 23.1583  
 14 CFR 23.1585  
 Eligible Serial Numbers: 4636460, 4636463 and up

PA-46-500TP: FAR 23, effective February 1, 1965, as amended by Amendment 23-25, effective March 6, 1980 unless otherwise indicated herein; FAR 23.1529 as amended by Amendment 23-26, effective October 14, 1980; FAR 23.441 as amended by Amendment 23-28, effective April 28, 1982; FAR 23.994 and 23.995 as amended by Amendment 23-29, effective March 26, 1984; FAR 23.781 as amended by Amendment 23-33, effective August 11, 1986; FAR 23.173, 23.333, 23.443, and 23.1165 as amended by Amendment 23-34, effective February 17, 1987; FAR 23.2, 23.783(a), (b), (e)(2) and (e)(3), and 23.1413 as amended by Amendment 23-36, effective September 14, 1988; FAR 23.331, 23.351, 23.421, 23.423, 23.425, 23.427, 23.831, 23.939, and 23.1163 as amended by Amendment 23-42, effective February 4, 1991; FAR 23.905, 23.937, 23.943, 23.951, 23.957, 23.961, 23.967, 23.971, 23.977, 23.991, 23.993, 23.997, 23.999, 23.1011, 23.1019, 23.1021, 23.1027, 23.1103, 23.1123, 23.1145, 23.1189, 23.1193, 23.1322, 23.1331, 23.1357, 23.1385, 23.1387, 23.1441, 23.1443, and 23.1445 as amended by Amendment 23-43, effective May 10, 1993; FAR 23.23, 23.141, 23.181, 23.251, 23.305, 23.321, 23.361, 23.397, 23.479, 23.485, 23.571, 23.572, 23.621, 23.655, 23.731, 23.733, 23.773, 23.1507, 23.1525, 23.1527, 23.1549, 23.1557, and 23.1563 as amended by Amendment 23-45, effective September 7, 1993; FAR 23.301, 23.335, 23.337, 23.341, 23.343, 23.345, 23.347, 23.349, 23.371, 23.391, 23.393, 23.399, 23.415, 23.457, 23.473, 23.499, 23.561, 23.575, 23.611, 23.629, 23.657, 23.673, 23.725, and 23.865 as amended by FAR 23-48, effective March 11, 1996; FAR 23.677, 23.723, 23.735, 23.745, 23.775, 23.841, 23.853, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1326, 23.1329, 23.1353, 23.1359, 23.1361, 23.1383, 23.1401, 23.1447, 23.1451, and 23.1453 as amended by Amendment 23-49, effective March 11, 1996; FAR 23.3, 23.25, 23.33, 23.45, 23.49, 23.51, 23.53, 23.63, 23.65, 23.69, 23.71, 23.73, 23.75, 23.77, 23.143, 23.145, 23.153, 23.155, 23.157, 23.161, 23.175, 23.177, 23.201, 23.203, 23.207, 23.221, 23.233, 23.235, 23.253, 23.1325, 23.1511, 23.1521, 23.1543, 23.1553, 23.1555, 23.1559, 23.1567, 23.1581, 23.1583, 23.1585, 23.1587, and 23.1589 as amended by Amendment 23-50, effective March 11, 1996; FAR 23.777, 23.779, 23.901, 23.903, 23.907, 23.925, 23.929, 23.933, 23.955, 23.959, 23.963, 23.965, 23.973, 23.975, 23.1013, 23.1041, 23.1043, 23.1045, 23.1091, 23.1093, 23.1121, 23.1141, 23.1143, 23.1153, 23.1181, 23.1183, 23.1191, and 23.1337 as amended by Amendment 23-51, effective March 11, 1996; and FAR 23.1305 as amended by Amendment 23-52, effective July 25, 1996. In addition, FAR 34.11, effective September 10, 1990, and FAR 36, Appendix G, Amendment 36-22. Equivalent Level of Safety (ELOS) for FAR 23.955(f)(3), June 6, 2000. Special Condition 23-123-SC (Docket CE153), August 27, 1999.

Compliance with the requirements of FAR 23.1419 as amended by Amendment 23-14, effective December 20, 1973, has been established, provided the required ice protection systems are installed and functioning properly.

For aircraft equipped with Piper factory installed Avidyne Entegra system and S-Tec Magic 1500 DFCS (See Piper Report VB-1919), the additional certification basis for installation specific items only is: FAR 23.1523 as amended by Amendment 23-34; FAR 23.613 as amended by Amendment 23-45; 14 CFR Part 23 regulations FAR 23.607 as amended by Amendment 23-48; FAR 23.1351, 23.1365, and 23.1431 as amended by Amendment 23-49; FAR 23.1545 and 23.1563 as amended by Amendment 23-50; Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005. Eligible Serial Numbers: 4697002, 4697198, 4697216 and up.

For aircraft equipped with Piper factory installed G1000 system and GFC700 AFCS (see Piper Report VB-1988), the additional certification basis for installation specific items only is: 14 CFR 23.1523 as amended by Amendment 23-34; 14 CFR 23.613, 23.672 as amended by Amendment 23-45; 14 CFR 23.607 as amended by Amendment 23-48; 14 CFR 23.1351, , 23.1365, and 23.1431 as amended by Amendment 23-49; 14 CFR 23.1545 and , 23.1563 as amended by Amendment 23-50; Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005.

Eligible Serial Numbers: 4697002, 4697340, 4697399 and up.

PA-46R-350T: For those portions of the airplane that are unchanged from the Model PA-46-350P: FAR Part 23, effective February 1, 1965, as amended by Amendment 23-25, effective March 6, 1980; FAR 25.783(e) as amended by Amendment 25-54, effective October 14, 1980; FAR 25.831(c) and (d) as amended by Amendment 25-41, effective September 1, 1977.

No equivalent safety findings.

Special Conditions No. 23-ACE-53, Docket No. 082CE.

For the Avidyne Entegra system installation (See Piper Report VB-1954) and modifications to that installation (See Piper Report VB-2008) the following additional requirements are applicable: FAR 23.1529 as amended by Amendment 23-26, effective 14 October 1980; FAR 23.1523 as amended by Amendment 23-34, effective 17 February 1987; FAR 23.1322, 23.1331, 23.1357 (a)(2), (b), (c), (d) as amended by Amendment 23-43, effective 10 May 1993; FAR 23.305, 23.613, 23.773 (a)(2), 23.1525, 23.1549 (a) as amended by Amendment 23-45, effective 7 September 1993; FAR 23.301, 23.337 (a)(1), (b)(1), 23.341 (a), 23.473, 23.561 (b)(3), (e), 23.571 (a), 23.607, 23.611, as amended by Amendment 23-48, effective 11 March 1996; FAR 23.1303 (a), (b), (f), 23.1307, 23.1309 (a), (a)(1), (a)(2), (b), (e), 23.1311 (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c), 23.1321 (a), (c), (d), (e), 23.1323 (a), (c), 23.1329, 23.1351 (a)(1), (a)(2)(i), (b)(2), (b)(3), 23.1353 (d), (h), 23.1359 (c), 23.1365 (a), (b), (d), (e), (f), 23.1431 (a), (b) as amended by Amendment 23-49, effective 11 March 1996; FAR 23.1325 (a), (b)(1), (b)(2)(ii), (b)(3), (c), (e), 23.1543 (b), (c), 23.1545(a), (b)(3), (b)(4), (c), 23.1555 (a), (b), 23.1563, 23.1581 (a), (b)(2), (b)(3), (f), 23.1583 (m), 23.1585 (j) as amended by Amendment 23-50, effective 11 March 1996; FAR 23.777 (a), (b), 23.1337 as amended by Amendment 23-51, effective 11 March 1996; FAR 23.1305 (a)(1), (a)(2), (a)(3), (b)(2), (b)(3), (b)(4), (b)(5), (b)(6)(i) as amended by Amendment 23-52, effective 25 July 1996 Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005.

For modifications specific to the PA-46R-350T airplane (see Piper Report VB-2008) the following additional requirements are applicable: FAR 23.1529 and Appendix G (Sec G23.1 and G23.2) as amended by Amendment 23-26, effective 14 October 1980; Appendix G (Sec G23.3) as amended by Amendment 23-34 effective 17 February 1987; FAR 23.2 as amended by Amendment 23-36 effective 14 September 1988; Appendix G (Sec G23.4) as amended by Amendment 23-37, effective 18 August 1990; FAR 23.831 as amended by Amendment 23-42, effective 4 February 1991; FAR 23.905, 23.1357, 23.1441, 23.1443, and 23.1445 as amended by Amendment 23-43, effective 10 May 1993; FAR 23.613, 23.773, 23.851, and 23.1527 as amended by Amendment 23-45, effective 7 September 1993; FAR 23.561, 23.572, 23.575, 23.607, and 23.611 as amended by Amendment 23-48, effective 11 March 1996; FAR 23.775, 23.783, 23.853, 23.1309, 23.1311, 23.1321, 23.1323, 23.1351, 23.1447, 23.1451, 23.1453, and Appendix F (Sec F23) as amended by Amendment 23-49, effective 11 March 1996; FAR 23.25, 23.1325, 23.1543, 23.1545, and 23.1589 as amended by Amendment 23-50, effective 11 March 1996; FAR 23.907 and 23.1191 as amended by Amendment 23-51, effective 11 March 1996; and FAR Part 36, effective December 1, 1969, as amended by Amendment 36-1, dated December 1, 1969 through Amendment 36-28, dated 3 February 2006

For the PA-46R-350T Matrix aircraft equipped with Hartzell propeller HC-I3Y1R-1N/N7605+2 or HC- I3Y1R-1N/N7605K+2 and Governor model S-1-30 (See Piper Report VB-2132) the additional certification basis for installation specific items only is: 23.907 as

amended by Amendment 23-59, effective 24 October 2008. Eligible Serial Numbers: 4692123 & up.

For PA-46R-350T aircraft equipped with Piper factory installed Garmin G1000 system and GFC 700 AFCS (See Piper Drawing 106900), the additional certification basis for installation specific items only as amended by Amendment 23-59 dated December 23, 2008, is:

14 CFR 23.23  
14 CFR 23.25  
14 CFR 23.251  
14 CFR 23.301 (a), (b), (c)  
14 CFR 23.305  
14 CFR 23.337  
14 CFR 23.341  
14 CFR 23.397 (a)  
14 CFR 23.473  
14 CFR 23.561 (a), (b)(3), (e)  
14 CFR 23.607  
14 CFR 23.611  
14 CFR 23.613  
14 CFR 23.677 (b), (d)  
14 CFR 23.773 (a)(1), (a)(2)  
14 CFR 23.777 (a), (b), (d)  
14 CFR 23.867  
14 CFR 23.1141 (a), (b), (c), (d)  
14 CFR 23.1303 (a), (b), (c), (f)  
14 CFR 23.1305 (a)(1), (a)(2), (a)(3), (b)(2), (b)(4)(i), (b)(5), (b)(6)(i)  
14 CFR 23.1307  
14 CFR 23.1308 (a) (1), (a)(2), (a)(3), (b), (c)  
14 CFR 23.1309 (a) (1), (a)(2), (b), (c), (e)  
14 CFR 23.1311 (a)(1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c)  
14 CFR 23.1321 (a), (c), (d)(5), (e)  
14 CFR 23.1322 (a), (b), (c), (d), (e)  
14 CFR 23.1323 (a), (c)  
14 CFR 23.1325 (a), (b)(1), (b)(2)(i)  
14 CFR 23.1326  
14 CFR 23.1329 (a) (1), (b), (d), (l), (g), (h), (e)  
14 CFR 23.1331 (a), (b), (c)  
14 CFR 23.1337 (b)(1), (b)(4)  
14 CFR 23.1351 (a)(1), (a)(2)(i), (b)(1)(i)  
14 CFR 23.1353 (h)  
14 CFR 23.1357 (a)(2), (b), (c), (d)  
14 CFR 23.1359 (c)  
14 CFR 23.1365 (a), (b), (d), (e), (f)  
14 CFR 23.1431 (a), (b), (e)  
14 CFR 23.1441 (b), (c), (e)  
14 CFR 23.1507  
14 CFR 23.1523  
14 CFR 23.1525  
14 CFR 23.1529  
14 CFR 23.1543 (b)(c)  
14 CFR 23.1545 (a), (b) (1), (b)(2), (b)(3), (b) (4)  
14 CFR 23.1549 (a), (b), (c)  
14 CFR 23.1553

	<p>14 CFR 23.1555 (a), (b), (d)(2)</p> <p>14 CFR 23.1559 (c)</p> <p>14 CFR 23.1563 (a) (b)</p> <p>14 CFR 23.1567 (a)</p> <p>14 CFR 23.1581</p> <p>14 CFR 23.1583</p> <p>14 CFR 23.1585</p> <p>14 CFR 23.1589</p> <p>Eligible Serial Numbers: 4692134 and up</p>
Production Basis	<p>Production Certificate No. 206. Production Limitation Record issued and the manufacturer authorized to issue airworthiness certificate under the delegation option provisions of FAR 21.</p>
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.</p> <p>In addition, one of the following items of equipment are required:</p> <ol style="list-style-type: none"> <li>1. DOA No. SO-1 approved Airplane Flight Manual Piper Report FT 157, Appendix D or Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1200 for Model PA-46-310P, S/N 46-8408001 through 46-8608067, and 4608001 through 4608007.</li> <li>2. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1300 for Model PA-46-310P, S/N 4608008 through 4608140.</li> <li>3. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1332 for Model PA-46-350P, S/N 4622001 through 4622200.</li> <li>4. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1609 for Model PA-46-350P, S/N 4636001 through 4636020.</li> <li>5. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1602 for Model PA-46-350P, S/N 4636021 through 4636131.</li> <li>6. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1446 for Model PA-46-350P, S/N 4636132 through 4636195. For S/N 4636160 special supplement VB-1855 is required.</li> <li>7. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1710 for Model PA-46-350P, S/N 4636196 through 4636374.</li> <li>8. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1689 for Model PA-46-500TP, S/N 4697001 through 4697156.</li> <li>9. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1751 for Model PA-46-500TP, (1999 kg) S/N 4697001 through 4697156</li> <li>10. DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1835 for Model PA-46-500TP (5092 lb. MTOGW) S/N 4697157 through 4697173 and earlier airplanes having Kit 767-360 installed.</li> <li>11. DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1888 for Model PA-46-500TP S/N 4697174 and up.</li> <li>12. DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1912 for Model PA-46-500TP S/N's 4697002, 4697198, and 4697216 and up equipped with standard Avidyne Entegra System.</li> </ol>

13. DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1948 for Model PA-46-500TP, (1999 kg) S/N's 4697198, 4697216 and up.
14. DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1950 for PA-46-350P S/N's 4636375 and up.
15. DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-2007 for PA-46R-350T S/N's 4692001 and up.
16. DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-1993 for PA-46-500TP S/N's 4697002, 4697340, 4697399 and up equipped with Garmin G1000 System and GFC700 FCS.
17. ODA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-2121 for PA-46-350P S/N's 4636460, 4636463 and up equipped with Garmin G1000 System and GFC700 AFCS.
18. ODA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-2122 for PA-46R-350T S/N's 4692134 and up equipped with Garmin G1000 System and GFC700 AFCS.

#### Noise Characteristics

The corrected noise level of the Model PA-46-310P is 74.8 dB(A) at the Maximum Normal Operating Power at 2600 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level test flights conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46-350P is 74.7 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level test flights conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46-350P equipped with the optional 3 blade propeller is 79.7 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46-350P equipped with the optional 3 blade propeller HC-I3Y1R-1N/N7605K+2 is 81.0 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the model PA-46-500TP equipped with the standard 4 blade propeller is 73.7 dB(A) at 4850 lbs. takeoff weight and 76.8 dB(A) at 5092 lbs. takeoff weight at the Maximum Normal Operating Power at 2000 RPM. This noise level has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the model PA-46R-350T is 81.3 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness

Certification.” The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46R-350T equipped with the optional 3 blade propeller HC-I3Y1R-1N/N7605+2 or HC-I3Y1R-1N/N7605K+2 is 81.0 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

NOTE 1. Current Weight and Balance Report, including list of equipment included in certificated empty weight and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certified empty weight and corresponding center of gravity locations must include undrainable system oil (not included in oil capacity) and unusable fuel as noted below:

- (a) PA-46-310P  
     Fuel: 12 lb. at (+152.37)  
     Oil: 2.8 lb. at (+53.5)
- (b) PA-46-350P & PA-46R-350T  
     Fuel: 12 lb. at (+152.37)  
     Oil: 3.8 lb. at (+61.0)
- (c) PA-46-500TP  
     Fuel: 20.1 lbs. at (+144.37)  
     Oil: 5.55 lbs. at (+77.76)

NOTE 2 All placards required in the POH and AFM must be installed in the appropriate locations. The following placard must be displayed in clear view of the pilot:

PA-46-310P and PA-46-350P:

"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Airplane Flight Manual. No aerobatics maneuvers, including spins, approved."

PA-46-500TP and PA-46R-350T:

"This aircraft must be operated as a Normal Category Airplane in compliance with the operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers, including spins are approved. This aircraft is approved for VFR, IFR day and night icing flight when equipped in accordance with the airplane flight manual."

NOTE 3 The below life limits are based on general aircraft usage for this aircraft class:

- (a) PA-46-310P  
     The life limit of the fuselage assembly, P/N 82250, is 10,145 hours time-in-service.  
     The life limit of the wing assembly, P/N 83100, is 15,580 hours time-in-service.
- (b) PA-46-350P  
     The life limit of the fuselage assembly, P/N 89600, is 10,145 hours time-in-service.  
     The life limit of the wing assembly, P/N 89640, is 15,580 hours time-in-service.
- (c) PA-46-500TP  
     For S/N 4697001 through 4697156:  
         The life limit of the fuselage assembly, P/N 89600-4, is 10,145 hours time-in-service.  
         The life limit of the wing assembly, P/N 89640-4/-7, is 13,349 hours time-in-service.  
         The life limit of the horizontal stabilizer assembly, P/N 102050-2, is 13,349 hours time-in-service.

- I The life limit of the vertical fin assembly, P/N 83401-10, is 13,349 hours time-in-service.  
For S/N 4697157 and up and earlier airplanes having Kit 767-360 installed:  
The life limit of the fuselage assembly, P/N 89600-4, is 10,145 hours time in service.  
The life limit of the wing assembly, P/N 89640-7, is 10,255 hours time in service.
- I The life limit of the horizontal stabilizer assembly, P/N 102050-2, is 10,255 hours time-in-service.  
The life limit of the vertical fin assembly, P/N 83401-10, is 10,255 hours time-in-service.  
For S/N 4697174 and up:  
The life limit of the wing assembly, P/N 89640-8, is 10,255 hours time in service.  
The life limit of the horizontal stabilizer assembly, P/N 102050-2, is 10,255 hours time-in-service.
- I The life limit of the vertical fin assembly, P/N 83401-10, is 10,255 hours time-in-service.
- (d) PA-46R-350T  
The life limit of the wing assembly, P/N 89640-10, is 15,580 hours time-in-service.  
The life limit of the horizontal stabilizer assembly, P/N 83404-2, is 15,580 hours time-in-service.  
The life limit of the vertical fin assembly, P/N 83401-9, is 15,580 hours time-in-service.
- NOTE 4 PA-46-350P serial numbers 4636196 and up incorporate additional structural strengthening of the wing landing gear that affects the maximum weights and C.G. range. This accounts for differences with respect to serial numbers 4622001 through 4622200 and 4636001 through 4636195.
- NOTE 5 Model PA-46-500TP:  
The maximum propeller shaft overspeed limit for the PT6A-42A is 100% (2205 r.p.m.) of all ratings. 91% propeller shaft speed is defined as 2000 r.p.m. and is the normal steady state operating limit. Gas generator speeds up to 104% are permissible for 10 seconds and 101.6% for unlimited periods subject to applicable temperature and other limits. 100% gas generator speed is defined as 37,500 r.p.m.
- NOTE 6 Model PA-46-500TP:  
Minimum propeller speed ( $N_p$ ) corresponding to minimum idle gas generator speed ( $N_g$ ) is 1200 RPM.
- NOTE 7 PA-46-500TP serial numbers 4697131 and 4697137 were never manufactured.

...END...